

WHAT IS CLAIMED

- 1) A filter bag for containing a substance for infusion in a liquid comprising a containment chamber, with at least one compartment for holding a dose of the substance which is sealed by top and bottom joins; a tag for picking up the bag; and a section of thread, wound around the outside of the containment chamber and extending along an outline, one end of the thread being connected to the pick-up tag and the other end connected to the top of the containment chamber, and wherein the section of thread is longer than the outline of the containment chamber to which it is attached, the excess length of the section of thread relative to said outline being gathered on the outside of the containment chamber for the substance for infusion.
- 2) The filter bag according to claim 1, wherein the containment chamber contains two compartments for doses of the substance, the compartments being opposite one another and connected at the top and bottom joins.

- 3) The filter bag according to claim 1 or 2, wherein the excess length of the section of thread is looser than the rest of the section of thread which, in contrast, is pulled taut along the outline of the containment chamber.
- 4) The filter bag according to claim 3, wherein the excess length of thread takes the form of at least one first winding loop.
- 5) The filter bag according to any of the foregoing claims, wherein the excess length includes a plurality of said winding loops.
- 6) The filter bag according to any of the foregoing claims, wherein the excess length of the section of thread is attached to the filter bag pick-up tag.
- 7) The filter bag according to claim 6, in which the pick-up tag includes at least two flaps which can be folded relative to one another, wherein the excess length of the section of thread is held between the flaps of the pick-up tag.

- 8) The filter bag according to claim 7, wherein the tag has a layer of adhesive material designed to make the flaps of the tag stick together and removably secure the excess length of the thread held there.
- 9) The filter bag according to claim 8, wherein the layer of adhesive material can be activated by suitable heating action.
- 10) The filter bag according to any of the foregoing claims, wherein the section of thread comprises a second loop, housed in one of the containment chamber compartments, the second loop having ends which project from the compartment, one towards the top join and the other through a side wall of the compartment which contains the second loop.
- 11) The filter bag according to any of the foregoing claims, wherein the pick-up tag is connected to the containment chamber by a seal between them.
- 12) The filter bag according to claim 10 or 11, wherein the pick-up tag and the second loop are attached to opposite side walls of one or each containment chamber compartment.

13) The filter bag according to claim 10 or 11, wherein the pick-up tag and the second loop are attached to two separate containment chamber compartments.

14) The filter bag according to any of the foregoing claims, wherein the containment chamber has a base which bends inwards.

15) The filter bag according to claim 14, wherein the base is "V"-shaped.

16) A method for producing a filter bag for containing a substance for infusion in a liquid, comprising the steps of:

feeding in a predetermined feed direction and parallel with one another: a filter paper web, a cotton thread positioned longitudinally to and opposite the filter paper web and a succession of tags, the latter being placed along the web at predetermined intervals;

forming on the thread a succession of first winding loops, separated by an interval corresponding to the tag interval;

connecting the first loops of thread to the

pick-up tags, and the pick-up tags to the paper web;

folding the filter paper web over itself so that its edges which were initially opposite one another are overlapping, gradually forming a filter paper tube;

depositing a succession of doses of the substance for infusion on the web, before the tube is definitively formed;

connecting the longitudinal edges of the tube to one another;

making pairs of transversal connections on the tube, upstream and downstream of the tag, designed to delimit a succession of sealed containment chambers containing at least one dose of the substance for infusion;

securing the sections of thread between the connections to the tube.

- 17) The method according to claim 16, in which the filter paper web has a layer of heat-activated adhesive material, wherein the connection of the longitudinal edges of the tube is made by heat-activation of the layer of adhesive material on the web.

- 18) The method according to claim 16 or 17, in which the filter paper web has a layer of heat-activated adhesive material, wherein the pairs of transversal connections are created by heat-activation of the layer of adhesive material on the web.
- 19) The method according to claim 16, 17 or 18, in which the filter paper web has a layer of heat-activated adhesive material, wherein the step of securing the sections of thread between the connections to the tube is done by heat-activation of the layer of adhesive material.
- 20) The method according to any of the claims from 16 through 19, in which the pick-up tag comprises two flaps which can be folded over one another, wherein the first loop is attached to the pick-up tag at one flap of the tag, the method comprising a folding step in which the second flap of the tag is placed so that it overlaps the first loop and is connected to the first flap of the tag.
- 21) The method according to claim 20, in which the pick-up tag has a layer of heat-activated adhesive material, wherein the flaps are

connected to one another by heat-activation of the adhesive material.

- 22) The method according to any of the claims from 16 through 21, further comprising a step in which the tag is creased to form a fold line for facilitated folding of one flap relative to the other.
- 23) The method according to any of the claims from 16 through 22, wherein the step of attaching the pick-up tag to the filter paper tube is performed by heat-activation of the layer of adhesive material.
- 24) The method according to any of the claims from 16 through 23, further comprising a step in which the filter paper web is cut, at a predetermined distance from the pick-up tag, forming a slit; and a step in which the thread is forced through the slit to form a second loop projecting from the filter paper web on the side opposite that in contact with the thread.

- 25) The method according to claim 24, wherein during formation of the tube the second loop is housed in the concave section of the web.
- 26) The method according to claim 24 or 25, further comprising a sealing step in which the second loop and the filter paper web are attached to one another.
- 27) The method according to claim 26, wherein the step of sealing the second loop to the filter paper web takes place before the tag is sealed to the filter paper web.
- 28) The method according to any of the claims from 16 through 27, in which the containment chamber is divided into two adjacent compartments, further comprising a step of folding the compartments so that they overlap one another and the thread is wound around the overall outline of the containment chamber so that the tag and first loop connected to it are located on an outer face of the overall containment chamber; and a step of uniting the top joins of the tubular compartments to form a single top of the filter bag containment chamber.



- 29) The method according to claim 28, wherein the step of uniting the top joins of the containment chamber is performed by sealing by heat-activation of the layer of adhesive material on the filter paper.
- 30) The method according to any of the previous claims from 16 through 29, further comprising a cutting step in which the corners of the tops of the containment chambers are removed from the bag.